

WHOOPING COUGH

What is Pertussis?

Pertussis, or whooping cough, affects people of all ages, but is most dangerous for infants and toddlers. Over the last several years, more than 40 percent of reported cases have been found in infants under 1 year of age, and over 55 percent of cases have been found in children less than 5 years of age. Most adult cases are undiagnosed, but sick adults can often transmit the disease to small children.

Pertussis is caused by bacteria carried on droplets that are produced when someone with pertussis coughs. The bacteria attach to the back of the throat and windpipe and bronchial tubes, damaging both. The patient develops a very severe cough, which comes in spasms, leaving no time to breathe. At the end of the cough spasm, the effort to draw a breath causes a whooping sound.

During an attack, a baby or child cannot breathe in enough air, which may cause him or her to turn blue, and may even cause seizures and permanent brain damage. Attacks may continue for one or two months despite antibiotic treatment. Even after the infection has ended, the coughing may continue sporadically for several more months because the damage done to the tissues in the windpipe takes a long time to heal.

Case Statistics

- Pertussis has caused an average of two deaths a year in California since the late 1980s. All of these deaths have been infants and toddlers under 2 years of age.
- In 1999, there were 1,144 pertussis cases reported in California. This represents an
 increase of 140 percent from the 478 cases reported in 1997, and the largest case
 count reported in a single year in California since 1967.

Treatment

 The best defense against whooping cough is immunization. It takes four doses (shots) to develop good immunity. (There is usually substantial partial protection after three doses.) An "acellular" pertussis vaccine is now available that causes much less injection site soreness, fever, and irritability.

- After the introduction of a pertussis vaccine in 1949, the number of cases dropped in California from 150 per 100,000 population each year to about 1.5 per 100,000. In 1983, the incidence rate of pertussis began to climb, and this increase has continued for 16 years. In 1999, the incidence rate for California was 3.4 cases per 100,000
- The U.S. Public Health Service and the American Academy of Pediatrics recommend that babies begin the whooping cough vaccine series as soon as they are 2 months of age. It is crucial that they stay on schedule, completing the four-dose series before they are 18 months of age. A booster dose is given before school entry to prolong protection. Immunity declines over time, so adults can get pertussis even if they were immunized as children. Presently, there is no vaccine approved for use by adults.